

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014106**Date Inspected:** 23-Mar-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Le Feng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

BAY 10**Shielded Metal Arc Welding (SMAW):**

Weld joint # 39A located on North Tower Lift-5 at A/B Corner NSD1 – TL5– 3B/F. Welder is identified as 500363. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – B – U4b.

Weld joint # 16 located on Façade Seal Angle ED1 – SFSA3 – 99. Welder is identified as 056200. ZPMC Quality Control (QC) Inspector is identified as Zhu Zhong Jie. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112. (See attached photo)

Weld joint # 22B located on North Tower Lift-5 at A/E Corner NSD1 – TL5– 3B/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U5b – 1.

Weld joint # 06 located on Façade Seal Angle WD1 – STSA3 – 104 – 2. Welder is identified as 040268. ZPMC Quality Control (QC) Inspector is identified as Zhu Zhong Jie. The welding variables recorded by QC appeared to

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comply with the WPS – B – P – 2112.

Weld joint # 13A located on North Tower Lift-5 at B/C Corner NSD1 – TL5– 3B/F. Welder is identified as 040581. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3212 – Tc – U4b – 1.

Flux Core Arc Welding (FCAW):

Weld joint # 49 located on North Tower Lift 4 Diagonal Plate at B/C corner NSTL4 – 3B/L. Welder is identified as 057180. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F – 2.

Weld joint # 49 located on North Tower Lift 4 Diagonal Plate at C/D corner NSTL4 – 3B/L. Welder is identified as 066471. ZPMC Quality Control (QC) Inspector is identified as Yuan Hui Gang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – Tc – P4 – F – 2.

BAY 11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005407

Visual Inspection Testing (VT)

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

EAST TOWER LIFT 4 DIAPHRAGM WEB TO SKIN A

1. ESTL4 – 2J/L – 28; 39

EAST TOWER LIFT 4 FIT-LUGS ON SKIN A

1. ESTL4 – 2J/L – 96; 34; 100; 36; 23; 102

EAST TOWER LIFT 4 SKIN A AND DIAPHRAGM

1. ESTL4 – 2J/L – 98; 31

EAST TOWER LIFT 4 SKIN A STIFFENERS AND DIAPHRAGM

1. ESTL4 – 2J/L – 103; 26; 43

Magnetic Particle Testig (MT)

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

EAST TOWER LIFT 4 DIAPHRAGM WEB TO SKIN A

1. ESTL4 – 2J/L – 28; 39

EAST TOWER LIFT 4 FIT-LUGS ON SKIN A

1. ESTL4 – 2J/L – 96; 34; 100; 36; 23; 102

EAST TOWER LIFT 4 SKIN A AND DIAPHRAGM

1. ESTL4 – 2J/L – 98; 31

EAST TOWER LIFT 4 SKIN A STIFFENERS AND DIAPHRAGM

1. ESTL4 – 2J/L – 103; 26; 43

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This QA Inspector observed the following work in progress:

Sub-Merged Arc Welding (SAW):

Weld joint # 20A located on West Tower Lift 5 A/B Corner WSD1 – TL5 – 4B/F. Welder is identified as 047304. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – C – U2b – S.

Weld joint # 32A located on West Tower Lift 5 A/B Corner WSD1 – TL5 – 4B/F. Welder is identified as 044552. ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3221 – C – U2b – S.

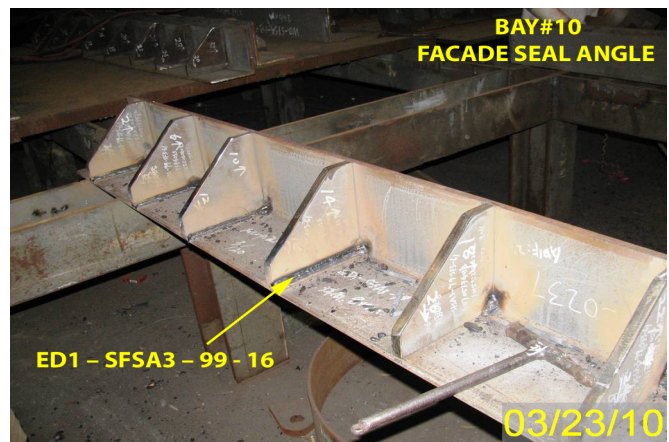
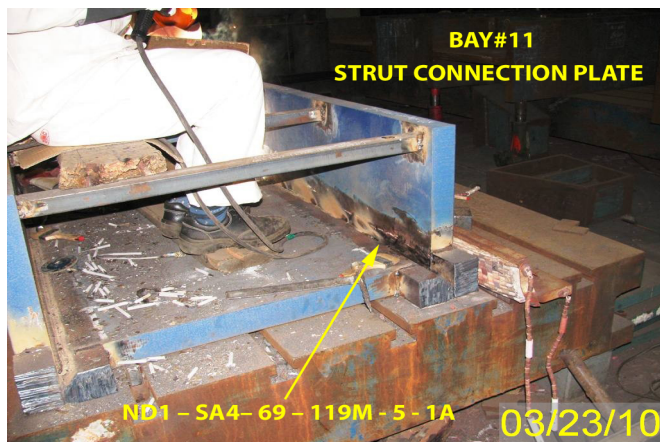
Shielded Metal Arc Welding (SMAW):

Weld joint # 5-1A located on Strut Connection plate ND1 – SA4– 69 – 119M. Welder is identified as 040667. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

(See attached photo)

Weld joint # 8-1A located on Strut Connection plate ND1 – SA4– 69 – 119M. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
